



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/392,947	09/09/1999	STEPHEN JOE MYERS	H-204258	2048

7590

12/18/2002

VINCENT A CICHOSZ  
DELPHI LEGAL STAFF  
P O BOX 5052  
MAIL CODE 480 414 420  
TROY, MI 480075052

EXAMINER

TRAN, HIEN THI

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 12/18/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/392,947

Applicant(s)

MYERS, STEPHEN JOE

Examiner

Hien Tran

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 14 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14 and 23-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14, 25-28, 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, line 2 "said periphery" lacks positive antecedent basis.

In claim 25, it is unclear as to how the first and second annular rings are related to the first and second endplate support mechanisms set forth in claim 24.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-8, 10, 23-27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaysert et al (4,043,761).

Gaysert et al discloses an exhaust system converter comprising: a catalyst 1'; a first end plate 9' positioned adjacent to a first end portion of said catalyst 1', said first end plate 9' forming a first end of the converter and comprising a first endplate support mechanism 9a extending perpendicularly therefrom toward said catalyst 1'; a mat support 8, substantially covering said catalyst 1' and a portion of the first endplate support mechanism 9a; and a shell 7',

Art Unit: 1764

having a diameter greater than that of the first end plate wherein said shell is disposed around said catalyst 1' and said mat support 8, and is disposed around and in intimate contact with at least a portion of said first end plate 9'.

With respect to claims 29-30, Gaysert et al discloses that the first end plate 9' including end plate 9b and a portion of endplate 9a being disposed in spaced relation to the first end portion of the catalyst.

With respect to claims 31-32, Gaysert et al discloses that the first and second endplates are flat.

Instant claims 1-3, 5-8, 10, 23-27, and 29-32 structurally read on the apparatus of Gaysert et al.

5. Claims 1-3, 6-8, 24-27, 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Frietzsche et al (3,854,888).

Frietzsche et al discloses an exhaust system comprising: a catalyst 2; a first end plate 8, positioned adjacent to a first end portion of said catalyst, said first end plate forming a first end of the converter and comprising a first endplate support mechanism 12 extending perpendicularly therefrom toward said catalyst; a mat support 10, 5, 6, substantially covering said catalyst and a portion of the first endplate support mechanism; and a shell 1, having a diameter greater than that of the first end plate wherein said shell is disposed around said catalyst and said mat support, and is disposed around and in intimate contact with at least a portion of said first end plate.

With respect to claims 31-32, Frietzsche et al discloses that the first and second endplates are flat.

Art Unit: 1764

Instant claims 1-3, 6-8, 24-27 and 31-32 structurally read on the apparatus of Frieztzsche et al.

6. Claims 1-3, 6-8, 24-27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Musall et al (4,432,943).

Musall et al discloses an exhaust system comprising: a catalyst 7; a first end plate 8, 11, positioned adjacent to a first end portion of said catalyst, said first end plate forming a first end of the converter and comprising a first endplate support mechanism (9, a portion of 11) extending perpendicularly therefrom toward said catalyst; a mat support 13, 4, 6, substantially covering said catalyst and a portion of the first endplate support mechanism; and a shell 1, having a diameter greater than that of the first end plate wherein said shell is disposed around said catalyst and said mat support, and is disposed around and in intimate contact with at least a portion of said first end plate (col. 2, lines 5-28).

With respect to claim 29, Musall et al discloses provision of the first end plate 8 being disposed in spaced relation to the first end portion of the catalyst.

With respect to claims 31-32, Musall et al discloses that the first and second endplates 11 are flat.

Instant claims 1-3, 6-8, 24-27, and 29-32 structurally read on the apparatus of Musall et al.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1764

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 4, 9, 11-12, 14, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Musall et al, Friezsche et al, or Gaysert et al in view of either Hass (3,832,443) or Keith et al (3,441,381).

Keith et al and Hass disclose the conventionality of providing a three-way catalyst.

It would have been obvious to one having ordinary skill in the art to substitute the catalyst of either Keith et al or Hass for the catalyst of the primary references for the known and expected results of obtaining the same results in the absence of unexpected results.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the ring and the endplate in two pieces and welded together, since it has been held that forming in two pieces an article which has formerly been formed in one piece involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

It would have been obvious to one having ordinary skill in the art to extend the shell to halfway across the periphery since it has been held that where the general conditions of a claim are disclosed in the prior art, merely discovering the relative dimension involves only routine skill in the art. *In re Gardner v. TEC systems, Inc.* 725 F.2d 1338, 220 USPQ 777.

***Response to Arguments***

10. Applicant's arguments filed 4/11/02 have been fully considered but they are not persuasive.

Applicants argue that all of the primary references do not have end plates as that of the instant claims. Such contention is not persuasive as the primary references disclose the end plates as set forth in the above rejections.

Applicants argue that Keith et al and Hass do not teach end plates. Such contention is not persuasive as the secondary references, Keith et al and Hass, are only relied upon for teaching the specific type of the catalyst material as set forth in the above rejections.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

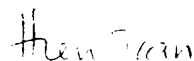
***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is 308-4253. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Art Unit: 1764

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.



HT  
December 13, 2002

**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**